QUANTITY OF INFORMATION

1 octet (byte) (symbol o / b) = 8 bit

Symbol	Binary	Byte
kbit (kilobit) – kb	2^{10}	1024
Mbit (megabit) – Mb	2^{20}	1048576
Gbit (gigabit) – Gb	2^{30}	1073741824
Tbit (terabit) – Tb	2^{40}	1099511627776

1. How many bits can be stored on a CD of 700 Mb?
2. How many kb can be stored on a CD of 800 Mb?
3. A book has on average 2500 characters per page. We know that a character is stored in a byte. How many book pages fit on a floppy disk 1440 kb? But on a 700 MB CD? But on a 4 GB DVD?
4. If a book of 220 pages is on average 2000 characters per page and a character is stored in a byte, what size should be the device needed to store 350 books??
5. How many characters per page has a book of 500 pages stored on a file of 1Mb (we know that one character is stored on 8 bytes)?
6. How many books of 512 pages (2560 characters per page, a character is stored in a byte) can be stored on a CD of 700 MB? But on 4 GB DVD?
7. How many medical images with the average size of 150 kb can be stored on a CD of 700 MB? But on an 800 MB CD? But on a 4 GB DVD?
8. Find the solution for the following operations:
    a. 120 kb + 120 kb = …. bytes
    b. 200 kb + 1024 b = …. kb
    c. 100 Mb + 1000 kb + 1 Gb = …. kb
    d. 120 kb + 120 kb = …….. b
    e. 128 b + 1020 o = ……..kb